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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/716,728	11/19/2003	Robert D. Galli	E001 P00759-US2	6303
3017	7590	06/28/2005	EXAMINER	
BARLOW, JOSEPHS & HOLMES, LTD. 101 DYER STREET 5TH FLOOR PROVIDENCE, RI 02903			REHM, ADAM C	
			ART UNIT	PAPER NUMBER
			2875	

DATE MAILED: 06/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/716,728

Applicant(s)

GALLI, ROBERT D.

Examiner

Adam C. Rehm

Art Unit

2875

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 November 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. The drawings do not appear to illustrate a lighting element having an output end "substantially entirely" on the exterior of an end wall per Claims 2, 4, 9, 13 and 19. This arrangement must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.
2. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: Claims 2, 4, 9, 13 and 19 commonly recite "said output end." Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

4. Claims 2, 4 and 9-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. Claims 2, 4, 9, 13 and 19 commonly recite the phrase "said output end...said end wall." As disclosed in Fig. 3, the head portion 32 is not entirely received on the end wall 22.
6. Regarding Claims 12 and 18, the following limitations do not have antecedent basis: (1) "the illuminated aperture" on "light output [directed through] said aperture" and (2) "said non-illuminated end wall" on "a light that does not impinge on the interior surface of an end wall." Furthermore, "non-impinging" and "non-illuminated" are distinguishable as well are "interior surface" and "end wall." Even further, it is not clear how a non-illuminated end wall can form an image.
7. Claims 10, 11, 13-17 and 19-23 are indefinite for depending on indefinite base claims.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-7, 10 and 12-17 are rejected under 35 U.S.C. 102(b) as being anticipated by OXLEY (US 4,712,163).
9. Regarding Claim 1, OXLEY provides, a receiver sleeve (28, Fig. 1) having a first end and a second end (either end of 28, Fig. 1), a tubular side wall (28, Fig. 1, Column 2, Line 58) having an interior surface (interior side of 28, Fig. 1), said tubular side wall extending between said first and second ends and a substantially planar end wall (26, Fig. 1) at said first end, said end wall having an interior surface (interior surface of 26 adjacent to open end 22), an exterior surface (opposite to interior surface 26) and an aperture in said end wall (Fig. 1 illustrates two apertures that receive terminations 20 and 22); a non-reflective coating on said interior surfaces of said side wall and said end wall (Column 2, Lines 56-58); and a lighting element (10, 20 and 22) having an output end (10), said output end of said lighting element received in alignment with said aperture adjacent said exterior surface of said end wall (Fig. 1).
10. Regarding Claim 2, as best understood by Examiner, applicant intends to claim a lighting element that is situated within an aperture wherein light output is directed into said aperture. OXLEY provides an output end of a lighting element (40, Fig. 2) that is

substantially on the exterior side of the plane of said end wall (44, Fig. 2), wherein light output from said lighting element is directed into said aperture (Figs. 1 and 2).

11. Regarding Claim 3, OXLEY provides an aperture having a central axis (Column 4, Line 2) that is aligned with a lighting element having an optical axis (40) (Fig. 2).

12. Regarding Claim 4, as best understood by Examiner, applicant intends to claim a lighting element that is situated within an aperture wherein light output is directed into said aperture. OXLEY provides an output end of a lighting element (40, Fig. 2) that is substantially on the exterior side of the plane of said end wall (44, Fig. 2), wherein light output from said lighting element is directed into said aperture (Figs. 1 and 2).

13. Regarding Claim 5, OXLEY provides an LED light source (10/40).

14. Regarding Claim 6, OXLEY provides a flat black non-reflective coating (Column 2, Lines 56-58).

15. Regarding Claim 7 and 10, OXLEY provides a lens (17/60) adjacent said second end of said receiver sleeve (Figs. 1 and 2), whereby said lens captures a circular image of the light output in said aperture and said interior surface of said end wall and projects said circular image into the far field of said lighting assembly, thus providing a circular illuminated spot (40, Fig. 2) having a clearly defined edge (Column 1, Lines 5-8).

16. Regarding Claim 9, OXLEY provides a tubular tail portion extending from said exterior side of said end wall (14/42, portion extending past end wall 26) concentric to said aperture (Fig. 2), said output end of said lighting element received in said tail portion (Figs. 1 and 2). As best understood by Examiner, applicant intends to claim a lighting element that is situated within an aperture wherein light output is directed into

said aperture. OXLEY provides an output end of a lighting element (40, Fig. 2) that is substantially on the exterior side of the plane of said end wall (44, Fig. 2), wherein light output from said lighting element is directed into said aperture (Figs. 1 and 2).

17. Regarding Claim 12, OXLEY provides, a receiver sleeve (28, Fig. 1) having a first end, a second end (either end of 28, Fig. 1) and an interior surface (interior side of 28, Fig. 1), an end wall at said first end of said receiver sleeve (26, Fig. 1), said end wall having an interior surface (interior surface of 26 adjacent to open end 22), an exterior surface (opposite to interior surface 26) and an aperture in said end wall (Fig. 1 illustrates two apertures that receive terminations 20 and 22); a lighting element having an output end (40), said output end of said lighting element received in alignment with said aperture adjacent said exterior surface of said end wall (Figs. 1 and 2), wherein light output from said lighting element is directed through said aperture such that the light entering the receiver sleeve through the aperture does not impinge on the interior surface of said end wall (Fig. 1, Column 2, Lines 29-31); and a lens (60) adjacent said second end of said receiver sleeve (Figs. 1 and 2). As best understood by Examiner, applicant intends to claim a non-reflective end wall wherein said lens captures and projects a circular image of the illuminated aperture forming a clearly defined beam cut-off edge thus providing a circular illuminated spot having a clearly defined edge in the far field of said lighting assembly. OXLEY provides a non-reflective end wall (26) and a circular lighting element (40), which inherently produces a circular light pattern.

18. Regarding Claim 13, OXLEY provides a tubular tail portion extending from said exterior side of said end wall (14/42, portion extending past end wall 26) concentric to

said aperture (Fig. 2), said output end of said lighting element received in said tail portion (Figs. 1 and 2). As best understood by Examiner, applicant intends to claim a lighting element that is situated within an aperture wherein light output is directed into said aperture. OXLEY provides an output end of a lighting element (40, Fig. 2) that is substantially on the exterior side of the plane of said end wall (44, Fig. 2), wherein light output from said lighting element is directed into said aperture (Figs. 1 and 2).

19. Regarding Claim 14 and 15, OXLEY provides a flat black non-reflective coating on the sleeve and end wall (Column 2, Lines 56-58).

20. Regarding Claim 16, OXLEY provides an aperture having a central axis (Column 4, Line 2) that is aligned with a lighting element having an optical axis (40) (Fig. 2).

21. Regarding Claim 17, OXLEY provides an LED light source (10/40).

22. Claims 18, 19, 22 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by WANG (US 4,949,231).

23. Regarding Claim 18, WANG provides a housing (1, Fig. 2) having a first end and a second end (either end of 1); a receiver sleeve (82, Fig. 1) received into said first end of said housing (Fig. 1), said receiver sleeve having a first end, a second end (either end of 82), an interior surface (interior surface of 82, Fig. 1) and an end wall at said first end of said receiver sleeve (42, Figs. 1 and 2), said end wall having an interior surface, an exterior surface (either side of 42) and an aperture therein (Figs 1 and 2), a mounting board adjacent said exterior surface of said receiver sleeve (3, Fig. 1), said mounting board having first and second electrical contacts thereon (72 and 74, Fig. 1); a power

source received in said second end of said housing (7, Fig. 2), said power source in electrical communication with said first and second electrical contacts on said mounting board (Column 1, Lines 60-65); a lighting element having an output end (76) and first and second contact leads extending therefrom (78, Fig. 1), said lighting element mounted to said mounting board such that said first and second contact leads are in electrical communication with said first and second electrical contacts respectively (Fig. 1 Column 1, Lines 60-65), said output end of said lighting element being in alignment with said aperture adjacent said exterior surface of said end wall (Fig. 1), wherein light output from said lighting element is directed through said aperture such that the light entering the receiver sleeve through the aperture does not impinge on the interior surface of said end wall (Fig. 2); switching means to selectively energize said lighting element (Fig. 5, Column 2, Lines 32-63); and a lens (84) adjacent said second end of said receiver sleeve (Figs. 1 and 2) wherein said lens that captures and projects a circular image of the illuminated aperture (Figs 1 and 2, the opening into 82) and the non-illuminated end wall (42) forming a clearly defined beam cut-off edge thus providing a circular illuminated spot having a clearly defined edge in the far field of said lighting assembly. Notably, WANG provides a non-illuminated end wall (42) and a circular lighting element (76), a circular reflector (82) and a circular lens, which inherently produces a circular light pattern.

24. Regarding Claim 19, WANG provides a tubular tail portion extending from said exterior surface of said end wall concentric to said aperture (4), said output end of said lighting element received in said tail portion (Fig. 1). As best understood by Examiner,

applicant intends to claim a lighting element that is situated within an aperture wherein light output is directed into said aperture. WANG provides an output end of a lighting element (76) that is substantially on the exterior side of the plane of said end wall (42), wherein light output from said lighting element is directed into said aperture (Fig. 2).

25. Regarding Claims 22 and 23, WANG provides an aperture (42) having a central axis that is aligned with an LED lighting element having an optical axis (76).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

26. Claims 8 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over OXLEY (US 4,712,163) in view of CARLISLE ET AL. (US 2002/0110320). OXLEY discloses the claimed invention as cited above including a lens (17/60) having a focal length that is coupled to said second end of said receiver tube (Figs. 1 and 2), said side wall of said receiver tube maintaining said lens at a fixed distance from said end wall (Fig. 1 and 2), but does not provide a lens at a distance approximately equal to its focal length. However, CARLISLE ET AL. (US 2002/0110320) teaches an illumination system having a lens configured at a distance equal to its focal length in order to optimally collimate light and direct said light in a parallel direction (Paragraph 25, Lines 17-25). It would have been obvious to one of ordinary skill in the art at the time of invention to modify the lighting device of OXLEY by situating the lens at a distance

equal to its focal length to optimally collimate light in a parallel direction as taught by CARLISLE ET AL in order for light from the LED to be visible relative to ambient light.

Allowable Subject Matter

27. Claims 20 and 21 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

28. The following is a statement of reasons for the indication of allowable subject matter: Claims 20 and 21 are allowable because none of the prior art of record suggests: a receiver and end wall having a flat black non-reflective coating.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

29. MGINNIS (US 4,774,643) provides an illuminator having a non-reflective receiver and a back wall having an aperture for receiving an LED.

30. PUGH (US 5,122,943) provides an LED that is encapsulated with a black-coated³ material in order to absorb unwanted light rays.


31. VETORINO ET AL. (US 5,975,714) provides a flashlight having a lens that is located within a tubular receiver and opposite from an LED that is situated one focal length away.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adam C. Rehm whose telephone number is 571.272.8589. The examiner can normally be reached on M-F 9-5:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on 571.272.2378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ACR
June 24, 2005



ALAN CARIASO
PRIMARY EXAMINER